Keeping Faith with the Dead: Mourning and De-extinction

Thom van Dooren and Deborah Bird Rose

Environmental Humanities, University of New South Wales

t.van.dooren@unsw.edu.au

deborah.rose@unsw.edu.au

ABSTRACT

This paper takes a critical perspective on the emerging prospect of 'de-extinction' as a response to the current period of massive biodiversity loss. Drawing on our own humanities and social sciences research into the complex cultural contexts in which conservation and extinction take place, we question some of the underlying philosophical premises of de-extinction projects, their potential to undermine existing relationships between conservationists and local communities and their capacity to elide the more significant issues of the complexity of human involvement in all this death.

Key words: De-extinction; extinction; conservation; environmental humanities; ethics.

DOI: http://dx.doi.org/10.7882/AZ.2014.048

Mourning and De-extinction

For roughly the past seven years, our combined research has focused on extinction. Drawing on the resources of the humanities – in particular philosophy and ethnographic work with local communities – we've explored what this particular form of mass death *means* for those caught up in it. How does extinction undermine various lives and livelihoods? How are funerary practices and indigenous forms of multispecies kinship challenged and unravelled by disappearing animals and plants? Why do some people dedicate their lives to conservation – what principles guide and motivate them – and why do others care so little? (Rose 2011, Rose and van Dooren 2011, van Dooren 2014a).

Importantly, however, our work has not simply focused on the 'human dimensions' of extinction. Instead, we have sought to challenge any neat separation between the 'natural' and the 'cultural'. Our research has explicitly drawn the humanities into conversation with biology, ecology and ethology to explore entangled communities of humans and nonhumans – to explore how *diverse* ways of life are being transformed at the edge of extinction.

At the outset we want to be clear that we recognise that extinction is part of the evolutionary history and future of life on earth. Our focus is on the contemporary mass extinction event directly and indirectly caused by humans. One of our central foci has been exploring what it might mean to develop an *ethical* relationship with extinction in our current period of anthropogenic mass extinction. In this context, we have been particularly intrigued, and more than a little concerned, by the growing interest that has surrounded so-called "de-extinction" projects.

Over the last few decades, but with increased intensity in the last few years, a range of technologies and approaches has begun coalescing under the banner of 'de-extinction'. Often framed in terms of atonement for past sins committed by a collective 'humanity', these de-extinction approaches range from the relatively low-tech programs of back-breeding that produced Heck cattle, through to the new possibilities opened up by interspecies somatic cell nuclear transfer and allele replacement techniques (Brand nd). While successes to date have been incredibly limited, the enthusiasm that surrounds the promise of something to come has proven to be highly contagious in some sectors.

A central part of what concerns us about these projects was succinctly captured by environmentalist Stewart Brand – now a leading de-extinction advocate – in his March 2013 TED talk. After listing a range of iconic species driven to extinction by humans in the past couple of hundred years, he posed the question of how this history makes us feel, and offered a challenge to radically reframe our responses to extinction.

In his words: "Sorrow, anger, mourning? Don't mourn, organize" (Brand 2013).

There is something disturbing about this response. Extinction, of course, is both an historical and an ongoing phenomenon, but importantly, it is also one that is firmly grounded in a wide range of complex cultural, religious, economic and technological practices and systems. Brand's commitment to practical action, to moving forward, steps across all the complexity. When it is presented as an *alternative* to meaningful and empathetic engagements, something is clearly wrong.

Buried within Brand's suggestion is a deep misunderstanding about the nature of mourning. We don't mourn for the fun of it, or to avoid doing something about a loss. Rather, as many psychologists and philosophers have insisted, processes of individual and collective mourning do important work in allowing us to learn from and 'work through' experiences of loss (Freud 1917, Riegel 2003). In the words of philosopher and counselor Thomas Attig, grieving is a process of 'relearning the world'. For Attig:

> *As we grieve, we appropriate new understandings of the world and ourselves within it. We also become different in the light of the loss as we assume a new orientation to the world. As we relearn, we adjust emotional and other psychological responses and postures. We transform habits, motivations, and behaviors … Some of what we took for granted in ourselves or in our life patterns is no longer viable or sustainable. Relearning the world thus requires that we make changes. (Attig 1996, 107-8)*

In short, mourning is a process of learning and transformation enabling accommodations to a changed reality. It is an individual psychological process, but at the same time a deeply relational pheonomenon. It involves the process of renewing and remaking relationships after loss, and re-starting the commitment to life and to community. Thus while grief is individually experienced, mourning involves action and is often carried out collectively both by human groups and by other animals (van Dooren 2014a, 125-144). Mourning is about dwelling with a loss and so coming to appreciate what it means, how the world has changed, and how we must ourselves change if we are to move forward from here. In this context, genuine mourning might open us into an awareness of our dependence on and relationships with those countless others being driven over the edge of extinction.

Equally, Brand's injunction skates across the complex factors, processes and participants in extinction: fractured ecologies, cultural fear and hatred, loss of interspecies mutualism and stories, sagas of political ineptitude, lashings of economic 'self-interest', and much much more. To evade all these issues in order to leap into de-extinction is an ostentatious display of bad faith toward both the living and the dead. Brand's response seems to us to buy into what the philosopher Daniel Innerarity has called "false motion". Here, the bright promise of new technologies, of *doing* something, undermines the genuine reflection needed to get somewhere better – not just different. In this context, Innerarity argues that we are living in a political time in which a perceived forward motion often "conceals an incapacity to confront needed reforms and to shape our collective future" (Innerarity 2012, 5).

In short, in our time of anthropogenic mass extinction, dwelling with extinction – taking it seriously, not rushing to overcome it – may actually be the more important political and ethical work. The reality is that there *is* no avoiding the necessity of the difficult cultural work of reflection and mourning. This work is not opposed to practical action, rather it is the foundation of any sustainable and informed response.

It is precisely this kind of reflection that leaves us with a healthy sense of cynicism in relation to Stewart Brand's vision of the world and the possible place of resurrected species within it. Take, for example, his concluding remark in this same TED lecture: "some species that we killed off completely we could consider bringing back to a world that misses them" (Brand 2013).

But where is this world? In our research we have encountered many individuals and even small communities of people who miss extinct species. We would also be the first to agree that a plant species might 'miss' its extinct pollinators in a non-trivial sense that should be acknowledged (Rose 2012, van Dooren 2014b). But to rush from here to a "world that misses them" is to move too far too quickly, and in so doing to rush over all of the difficult work of living well with others. It is to completely fail to grasp that many humans don't 'miss' extinct or endangered species at all. Indeed, many people do not or will not welcome them back into their lives or environments.

The history of endangered species conservation over the past few decades is one of a slow awareness of the need to work with local people – to take seriously their values, livelihoods and cultural formations. And yet, all this hard-earned history seems to have been immediately forgotten when the possibility of a resurrected mammoth enters the room. Where would returned mammoths go? What about passenger pigeons (*Ectopistes migratorius*)? Once present in flocks of hundreds of millions of birds, which part of the contemporary United States will play host to these animals? How quickly will they be declared pests and targeted for 'control' or eradication? Closer to home, what sense does it make to dream of returning the thylacine (*Thylacinus cyanocephalus*) when we cannot even ask people to make room for dingoes (*Canis dingo*)? Have the sheep farmers who once played a pivotal role in the extinction of the thylacine in Tasmania so changed their ways that this resurrection will be a success? Or are we resurrecting species only for a future life in a theme park, or perhaps as pets – animals whose primary purpose is to serve as living testimony to the human techno-triumph of having brought them into being?

In short, while there might be some viable candidates for de-extinction, any realistic and responsible application of these technologies would need to take the broader cultural and economic context far more seriously than is currently the case. These are *entangled human and nonhuman* communities of life that need to be considered in all of their evolving complexity (Jørgensen 2013).

The spate of recent monk seal (*Monachus schauinslandi*) killings in Hawai'i is just one example from our current research. Here, an iconic charismatic mammal that is highly endangered is occasionally targeted by locals – shot or beaten to death – and left on the beach. In the same island chain we have also been researching efforts to release captive bred Hawaiian crows (*Corvus hawaiiensis*, known locally as 'alalā), a species now extinct in the wild. Here too, local responses are deeply mixed; many people support conservation but many others see it as an intrusion into their lives and landscapes. This is so much the case that conservationists fear that released birds may be targeted by local hunters unhappy about changing forest management.

What we see here is an all too familiar dynamic. As Jon Mooallem has noted with specific reference to the US, but the same could be said of many other places, "We live in … an age, with extraordinary empathy for endangered species. We also live at a time when alarming numbers of protected animals are being shot in the head, cudgeled to death or worse" (Mooallem 2013).

The reasons behind these violent responses are always complex, but in more than a few cases – as Mooallem notes – it is the 'success' of conservation that is giving rise to these frictions. Reflecting on the past forty or so years of conservation under the US *Endangered Species Act*, he notes that: "now that we've recovered many of those species, we don't quite know how to coexist with them. We suddenly remember why many of us didn't want them around in the first place. Gray wolves, sandhill cranes, sea otters: species like these, once nearly exterminated, are now rising up to cause ranchers, farmers and fishermen some of the same frustrations all over again. These animals can feel like illegitimate parts of the landscape to people who, for generations, have lived without any of them around — for whom their absence seems, in a word, *natural*" (Mooallem 2013).

Of course, the difficulty we have convincing people that they should make room for a monk seal or a crow that has been missing from the forest for ten years will pale in comparison to the suggestion that they ought to accommodate a carnivore like the thylacine or immense flocks of passenger pigeons. Equally as importantly, one wonders on what grounds we can expect success from these incredibly complex and expensive de-extinction projects when we seem to have so much trouble finding room in the world for a broad range of species who aren't yet extinct.

We are pointing to real issues in relation to the ways in which de-extinction projects might *impact* on local communities; how they might be *perceived* by local communities; and how, in turn, de-extinction might come to impact on the broader endangered species conservation agenda. This mainstream conservation agenda is already viewed with scepticism if not outright hostility by many people. In many of the places where we conduct research, it seems likely to us that de-extinction will be viewed as an extravagant expense, out of touch with reality, producing yet more obstacles for local livelihoods. In short, there is a real risk that these projects may undermine goodwill towards conservation through their perceived role in *unnecessarily manufacturing additional conservation problems with all their attendant impacts on local people*.

To return to our main point about the ethics of keeping faith with the dead, a prime task is to understand how and why extinctions occur and to seek to prevent future extinctions. The underlying ethical command is familiar: that their deaths not be in vain. This would entail learning from extinctions rather than leaping into "techno-fixes" and numbers games that purport to halt the process by keeping a few individuals alive or bringing them back from the dead.

In this complex context, we do not need the promise of a new technology that allows us to reverse the unimaginable. Rather, what is needed is the kind of difficult reflection and discussion that forces us – as individuals and cultures – to *dwell* with our actions and their consequences, and in so doing – maybe, just maybe – to begin to wind back the current rate of extinctions. Bringing back a few species through painful and fraught procedures that arguably have a very low chance of success in the long term, whilst at the same time continuing to carry on the widespread destruction of living systems on this planet, is both monumental folly and cruelty.

In an important sense, we are not yet ready for de-extinction – if indeed we ever will be.

Instead, what the current time demands is a genuine reckoning with ourselves as the agents of mass extinction. In short, we need to *mourn*, to spend a little time with the dead; to keep faith with their lives and deaths and in so doing to own up to the reality of the world that we are ushering in.

References

Attig, Thomas. 1996. *How We Grieve: Relearning the World*. Oxford University Press, New York.

Brand, Stewart. 2013. *The Dawn of De-Extinction. Are you Ready?* 2013 [cited 8 November 2013]. Available from http://longnow.org/revive/de-extinction/2013/stewart-brand-the-dawn-of-de-extinction-are-you-ready.

Brand, Stewart. n.d. *Revive and Restore: Frequently Asked Questions* [cited 8 November 2013]. Available from http://longnow.org/revive/faq.

Freud, Sigmund. 1917. Mourning and Melancholia. Pp. 237-258 in *The Standard Edition of the Complete Psychological Works of Sigmund Freud*, edited by James Strachey. Hogarth, London.

Innerarity, Daniel. 2012. *The Future and its Enemies: In Defense of Poilitical Hope*. Stanford University Press, New York.

Jørgensen, Dolly. 2013. Reintroduction and De-Extinction. *BioScience* 63, no. 9: 719-20.

Mooallem, Jon. 2013. Who Would Kill a Monk Seal? *New York Times Magazine*, May 8.

Riegel, Christian. 2003. *Writing Grief: Margaret Laurence and the Work of Mourning*. University of Manitoba Press, Winnipeg.

Rose, Deborah Bird. 2011. *Wild Dog Dreaming: Love and Extinction*. University of Virginia Press, Charlottesville, VA.

Rose, Deborah Bird. 2012. Cosmopolitics: The Kiss of Life. *New Formations* 76: 101-113. doi: 10.3898/NeWf.76.07.2012.

Rose, Deborah Bird and Thom van Dooren. 2011. *Unloved Others: Death of the Disregarded in the Time of Extinctions*. Special issue of *Australian Humanities Review* 50.

van Dooren, Thom. 2014a. *Flight Ways: Life and Loss at the Edge of Extinction*. Columbia University Press, New York.

van Dooren, Thom. 2014b. Life at the Edge of Extinction: Spectral Crows, Haunted Landscapes and the Environmental Humanities. *Humanities Australia* 5.